

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1. (currently amended) A method of ~~encoding~~ representing a frame counter used in communication between a sender and a receiver, the frame counter having a first component representing an encoded frame counter and a second component representing a sequence counter, the method comprising the steps of:
 - a) maintaining ~~a~~said sequence counter and ~~a~~said frame counter at the sender;
 - b) ~~computing new~~ establishing an updated values of the frame counter as the next value in a direction of counting from the current value of the frame counter that is congruent to the sequence counter modulo the size of the sequence counter ; and
 - c) computing an encoded value of the frame counter by removing from the frame counter (50) a component equal to the value of the sequence counter such that the updated frame counter is uniquely and recoverable from an said encoded value of the frame counter and said sequence counter.
2. (currently amended) A method according to claim 1 wherein the sequence counter is ~~incremented~~ updated each time a message is sent.
3. (original) A method according to claim 1 wherein the frame counter is congruent to the sequence counter modulo 256.
4. (cancelled)
5. (currently amended) A method according to claim ~~4~~1, wherein the frame counter is recovered by concatenating the encoded frame counter value with the sequence counter.
- ~~5-6.~~ (currently amended) A method according to claim 5 wherein the encoded value of the frame counter is 3 bytes in length .

6.7. (currently amended) A method of transmitting messages from a sender to a recipient over a wireless channel, the order of messages being identified by a frame counter having a first component representing an encoded frame counter and a second component representing a sequence counter, said messages including a value representing the sequence counter frame counter, the method comprising the steps of:

- a) establishing an initial value ~~values of~~ for the ~~sequence counter and the~~ frame counter at said sender;
- b) providing the initial values ~~of~~ representing said frame counter and said sequence counter to said recipient;
- c) subsequently ~~compressing~~ sending messages including the value of the sequence counter and not the encoded frame counter;
- d) periodically sending messages including the value of the frame counter according to predefined criteria;
- ~~d) monitoring for an acknowledgement of receipt by said recipient;~~
- ~~e) when no acknowledgement is received, sending uncompressed messages until an acknowledgement of receipt is received from said recipient;~~
- ~~f) incrementing~~ updating the value of said sequence counter; and
- ~~g) establishing the next value of the frame counter as the next value in a direction of counting from the current value of the frame counter that integer next larger than previous value of the frame counter which is congruent to the sequence counter modulo 256~~ the size of the sequence counter.

7. (cancelled)

8. (currently amended) A method according to claim 5 wherein the predefined criteria are when that an uncompressed message is sent after a predetermined number of compressed messages including the value of the sequence counter and not the encoded frame counter are sent.

9. (original) A method according to claim 7 wherein the predetermined number is in the range 2 to 10.

10. (currently amended) A wireless device for receiving communications ~~from other~~ between wireless devices in a wireless network, each of the wireless devices comprising:

- a) storage for a frame counter;
- b) a receiver for obtaining a message over the wireless network, the message including a sequence counter and data encrypted via an encryption using a secret key and an new updated value of the frame counter as input to the encryption;
- c) a decryptor configured to perform decryption complementary to the encryption used in the message, the decryptor having access to the secret key; and
- d) a processor connected to the message receiver and configured to recover the value of the frame counter from a sequence counter in the message and provide the frame counter and encrypted data from the message to the decryptor.

11. (currently amended) A wireless device for sending communications ~~to other~~ between wireless devices in a wireless network, each of the wireless devices comprising:

- a) storage for a frame counter and a sequence counter;
- b) a processor ~~to compute~~ for:
 - i) establishing an new updated value of the frame counter as the next value in a direction of counting from the current value of the frame counter that is congruent to the sequence counter modulo the size of the sequence counter;
 - ii) computing an encoded value of the frame counter by removing from the frame counter a component equal to the value of the sequence counter such that the updated frame counter is uniquely and recoverable from an said encoded value of the frame counter and said sequence counter; and

- c) a transmitter for sending a message over the wireless network, the message including a sequence counter and data encrypted via an encryption using a secret key and the ~~new~~ updated value of the frame counter as input to the encryption.

12. (new) A method according to claim 2 wherein said update is an increment.

13. (new) A method according to claim 5 wherein the sender monitors for an acknowledgement of receipt of said message by said recipient, and the predefined criteria are when no acknowledgement is received.